Technical Exercise

You are required to develop a Customer Onboarding Application:

- data stored in an H2/Redis/mySQL or other database
- use a micro service approach so that the development done can be reused by other application and should be secured, maintainable and scalable.
- upload your final work together with the unit tests on GIT
- use of tech stack:
 - o Angular 13+
 - Java (latest SDK)
 - Spring Boot
 - NodeJS
 - o Camunda to design the flow and application (desirable)
- marks will be allocated to your:
 - o design and implementation skills
 - coding practice
 - UX/UI of interfaces developed (you can enhance the template provided)
 - o use of micro-service approach
 - unit testing/TDD

You are required to build a Customer Onboarding Application, so that customers can fill in a form and upload all required documents. The **12 fields** on the form are as follows:

- 1. Main purpose for applying at MCB [Drop down]: Investment portfolio, Account to operate locally, Account to operate overseas, Energy & commodities financing
- 2. Name of company (free text)
- 3. Type of entity (Trust, Association, Private Company...)
- 4. Business activity (drop down list: Banking, Fishing, Manufacturing)
- 5. System to prompt license requirements if business activity is Banking (text field)
- 6. Country of incorporation (list of countries, drop-down)
- 7. Registration number
- 8. Date of incorporation
- 9. Name of Director/ Shareholders
- 10. Passport number of directors
- 11. Name of designated applicant
- 12. Email address for further communication (with auto email check)

Note the customer onboarding application will compromise of 3 personas:

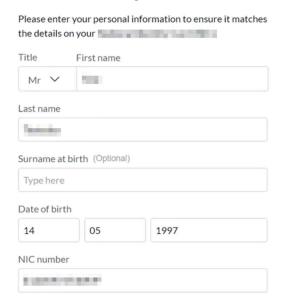
- 1. Customer
- 2. Processing Team
- 3. Approver

Please find below the UX design of some screens:

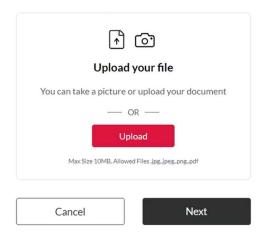
Persona: Customer

Below is an example of the first screen to capture the 12 fields above.

Nice to meet you



Upload document:



After application submitted, an application id should be auto generated:

Your application has been successfully submitted.

Your application is being processed and all communications on your application will be shared with you by the Customer Service Representative helping you in branch.





Persona: Processing Team

The processing team

- 1. Should have a dashboard to be able to view all customer onboarding applications submitted.
- 2. In the dashboard, the following fields should be displayed as columns:
 - a. Name of company
 - b. Type of entity
 - c. Business activity
 - d. Country of incorporation
 - e. Registration number
- 3. Should be able to open one application and view all fields in editable mode
- 4. Should be able to view the documents uploaded
- 5. Crop and save signature from the uploaded document(s)
- 6. Should be able to click on a proceed or reject button

Persona: Approver

The approver should receive the application once the processing team has submitted the application. They should be able to see only customer onboarding applications which are already assessed by the processing team.

The approver can approve or reject the application.

Upon approval, the application should be created on the Core Banking System (Mocking can be used here or you can call an available online API).

Additional Instructions:

- Provide necessary validations as applicable.
- Bring any additional enhancements as required such as security, logging, error handling and unit testing/Test Driven Development.